

Former Albion Works

Hunningley Lane

Stairfoot

Barnsley

Phase 2 Pre-development Arboricultural Report

Prepared for Peter Thompson Architects

05 May 2020

By

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Summary

I have been instructed by Peter Thompson Architect on behalf of C Soar & Sons (UK) Ltd to carry out a pre-development tree survey of the trees at the former Albion Works off Hunningley Lane, Stairfoot, Barnsley where two new industrial units are proposed.

The location, spread and root protection areas (RPAs) of eight individual trees and two small groups are recorded on Plan 1, that shows the existing layout.

Table 1 records information about the trees, including their species, dimensions, age, life expectancy, retention category and root protection area. This information was collected, interpreted and recorded in accordance with BS5837:2012 *Trees in relation to design, demolition and construction – Recommendations*.

Plan 2 shows the proposed layout.

The trees are growing around the boundary of the site. All but two are growing outside the boundary fence. They are all small and insignificant. Most are in good health but some have been very badly pruned. For these reasons all but one have been included in the lowest retention category (C).

One tree, Tree 3, has been included in category 'U' meaning that it is not suitable for retention due to its poor condition.

The development will not impact on the trees growing on neighbouring land.

It would be advisable to remove Trees 2, 3 and 10 prior to development due to their proximity to the proposed buildings. This would have a negligible impact on amenity.

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1.0 Introduction

1.1 Instruction

I have been instructed by Peter Thompson Architect on behalf of C Soar and Sons (UK) Ltd to carry out a pre-development tree survey of the trees at the former Albion Works off Hunningley Lane, Stairfoot, Barnsley where two industrial units are proposed.

The tree survey is intended to provide a structured, impartial assessment of the tree population within the proposed development area.

The survey is intended to be informative to all stages of the development process and was carried out in accordance with *BS5837: 2012 Trees in relation to design, demolition and construction – Recommendations*.

1.2 Documents and Information Provided

I was provided with the following documents:

A topographical survey of the site Dated November 2019. Edition 01

A drawing showing the proposed layout: Dated August 2019. Revision C

1.3 Limitations

This report is concerned only with assessing the condition of the trees, their importance in the local landscape and any cultural and conservation values.

It takes no account of the affects the trees may have on the soil, such as heave where trees are removed or shrinkage where trees are retained.

Trees are dynamic organisms influenced by weather, pests and diseases. Therefore, this report can only remain valid for a period of 24 months.

Any works around the trees such as trenching, pruning, storage of materials and trafficking that has not first been approved by a suitably qualified arboriculturalist will invalidate this report.

No decay detection equipment was used to gather information about the trees. All survey and inspection was completed at ground level.

2.0 Site Visit and Observations

2.1 Site Visit

The site visit took place on 27 April 2020. All dimensions were taken using recognised methodology and arboricultural measuring equipment, unless otherwise stated.

The weather at the time of inspection was sunny with light winds and good visibility.

2.2 Brief Site Description

The site is located to the south of Hunningley Lane, Stairfoot at Ordinance Survey grid reference SE 3715 0538.

The site is flat and has been cleared of all former buildings and former uses to leave hardstanding across the entire site. The site is fenced with metal security fencing and the trees are growing around the edge of the site, almost exclusively on neighbouring land.

2.3 Development Proposals

The proposes include two industrial units. The smaller of the two would be on the northern boundary close to Hunningley Lane. The second, almost twice the size of the other would be located in the southern corner of the site.

2.4 Tree Observations

The trees and shrubs included in this report were inspected in detail and the information on their size, condition and retention categories is included in Table 1 below.

2.5 Locations of the Trees

The positions of the four individual trees were plotted by me using fixed known points to triangulate from.

I am not a surveyor but I believe the accuracy is sufficient for the purposes of this report. If more accuracy is required I recommend that the services of a land surveyor are employed.

Table 1. The Tree Survey

Tree number	Species	Height (M)	Stem diameter (DBH in MM)	Branch spread (M)	Ht first branch above GL* (M)	Ht of canopy above GL (M)	Life stage	Vitality	General observations on the tree's condition	Estimated life in years	Category
1	Ash	4.0	180 at 0.5m	North – 1.5 South – 1.5 East – 1.5 West – 1.5	0.5	0.5	Semi mature	Normal	A very small, insignificant tree close to the entrance. It is probably self-seeded.	10+	C (1)
2	2 x ash	4.0	150, 180	North – 2.0 South – 0.0 East – 0.0 West – 0.0	2.0	2.0	Semi mature	Normal	Two small, young trees growing close to the fence. They have been topped at 4m.	10+	C (1)
3	Goat willow	5.0	440	Northeast – 2.5 South – 0.0 East – 0.0 West – 1.5	2.0	2.0	Mature	Normal	The tree has been topped at 4m. There is a large crack in the main stem between 0.5 and 2.0m. This is a major defect.	<10	U
4	Group of Field maples and damson	5.0	<200 #	North – 1.0 South – 1.0 East – 1.0 West – 1.0	GL	GL	Juvenile mature	Normal	A group of small, young trees growing closely together. They have been topped at 5m.	10+	C (1)

5	Norway maple	6.0	250#	North – 2.0 South – 3.0 East – 3.0 West – 2.0	0.5	0.5	Juvenile mature	Normal	A small, healthy tree growing on the neighbouring site. It will have been planted as part of the development to the east.	20+	C (1)
6	Goat willow	4.0	100, 200, 100#	North – 3.0 South – 3.0 East – 3.0 West – 0.0	GL	2.0	Young mature	Normal	A healthy, small tree growing on the neighbouring site. The tree has been topped at 3.5m.	20+	C (1)
7	Norway maple	4.0	100# at 1.2m	North – 2.0 South – 2.0 East – 2.0 West – 1.0	0.3	1.5	Juvenile mature	Normal	A small, healthy tree growing on the neighbouring site. It will have been planted as part of the development to the east.	20+	C (1)
8	Norway maple	4.0	250#	North – 3.0 South – 3.0 East – 2.5 West – 1.0	0.3	1.5	Juvenile mature	Normal	A small, healthy tree growing on the neighbouring site. It will have been planted as part of the development to the east.	20+	C (1)
9	5 x Hawthorns	<6.0	<150	North – 1.0 South – 2.0 East – 2.0 West – 2.0	1.0	1.0	Mature	Normal	Growing on the boundary. They are closely spaced and will have been a hedge at one stage before beginning to develop into a line of small trees without management.	20+	C (1)
10	Weeping willow	8.0	320	North – 3.9 South – 3.0 East – 3.7 West – 4.0	2.0	GL	Juvenile mature	Normal	A small, healthy tree growing just inside the site. It is growing in a raised bed area 1m above the normal level of the site. It has been pollarded at 5m.	40+	C (1)

- Estimated * GL - Ground Level

3.0 Interpretation of Information and References

My interpretation and appraisal of information gathered from the survey is based on experience of tree species, visual risk hazard assessment and the guidance set out in BS5837:2012 *Trees in Relation to Design, Demolition, Construction – Recommendations*. My qualifications and experience in arboriculture are included in appendix 1.

3.1 BS5837:2012 Tree Retention Categories

All trees have been assessed and assigned a category in accordance with Table 1 of the standard. A copy of Table 1 is included as Appendix 2. This categorisation is intended to rank trees according to their importance in terms of quality, health, life expectancy, amenity and landscape value, together with wildlife and cultural importance. This ranking assists in determining the suitability and appropriateness of trees for retention in any development. Categories A to C are those considered for retention, 'A' being highest. Category 'U' trees are those not suitable for retention because of impaired condition.

Generally, category A and B trees should be given more consideration in layouts than category C trees as these are considered more valuable because of their condition, landscape value, future life expectancy or, on occasions because of their more favourable habitat value.

3.2 Below Ground Constraints; Root Protection Areas (RPAs)

The root protection area is the area of land considered necessary for trees should they be retained as part of any development. This is calculated using the stem diameter measured at 1.5 metres from ground level. This protection area is shown diagrammatically as a circle centred on the base of the tree where it is expected that rooting has not been impeded in any one direction and where disturbance has not taken place. See Plan 1. Where rooting has been impeded or disturbance taken place then the shape and size of the root protection area is modified according to an assessment of where rooting is likely to take place.

Where trees are to be retained, it is optimal to locate structures and services outside the RPA. However, where incursion becomes necessary, technical solutions may be possible to limit damage, areas lost can be compensated elsewhere, or the soil environment can be improved. In these circumstances an arboricultural method statement will be necessary to ensure that works are undertaken sympathetically and do not damage the below ground parts of the trees.

3.3 Above Ground Constraints; Crown Spreads

Ideally, working areas and construction will be out with the crown spreads of trees to be retained. However, where access by high sided vehicles and machinery for construction or erection of scaffolding is necessary within the crown spreads of trees to facilitate development an arboricultural method statement will be necessary to ensure pruning works are carried out sympathetically prior to construction works commencing.

Any permanent development within the canopy spread of a tree will also require a method statement. However, the effects of shade and other perceived inconveniences of trees this close to property should also be considered, together with the future growth potential of the trees and the maintenance obligation this will bring.

3.4 Conception and Design

The constraints imposed by trees should assist with site design and layout, together with the other competing needs of development. Generally, the trees in the higher categories (A and B) should be given greater consideration in any layout than the lowest retention category (C).

As well as the footprint of buildings, the provisions of services, infrastructure layout and the access space required for construction itself should be considered.

4.0 Arboricultural Impact Assessment and Method Statement

4.1 Arboricultural Impact Assessment

None of the trees are growing within the proposed footprint of either of the buildings. It would be advisable to remove Trees 2, 3 and 10 due to the proximity the buildings will be to these trees. These are small and insignificant trees. Tree 3 is structurally unsound in any case.

The trees planted on the neighbouring land to the east would be unaffected by the proposed buildings. Their RPAs do extend slightly into the site and roots could be affected by any re-grading of the ground or new surfacing that is laid. I have not been provided with any details for the type of finished surface or the extent of the finished surface.

Avoiding regrading and surfacing work within 2m of the eastern boundary would avoid damage to these trees. Alternatively, because they are very young they could be replaced without any loss to amenity.

5.0 Conclusions

The majority of the trees are growing around the boundaries of the site and on neighbouring land.

All of the trees are very small and young, either having been planted or self-seeded within the last decade or so.

All but one of the trees are included in the lowest retention category (C) because they are small, young and insignificant.

One tree, Tree 3 is included in the 'U' category which means that it has significant defects and has less than 10 years of life expectancy remaining.

I would recommend that Trees 2, 3 and 10 are removed if the proposed layout is implemented.

The development would not have a significant impact on tree cover in the area.

6.0 Legal Considerations

Protected trees

No checks have been made with the Local Planning Authority for Tree Preservation Orders, other planning conditions or inclusion of the site in a Conservation Area. However, if any of the trees subject to this report are protected it will be necessary to apply to the local planning authority (LPA) for permission before any work, other than certain exempted operations, can be carried out.

Trees on neighbouring land

Trees growing on neighbouring land may be pruned backed to the boundary point without the owner's permission provided access to the owner's land is not necessary, the health of the trees is not damaged and the cut material is offered back to the owner.

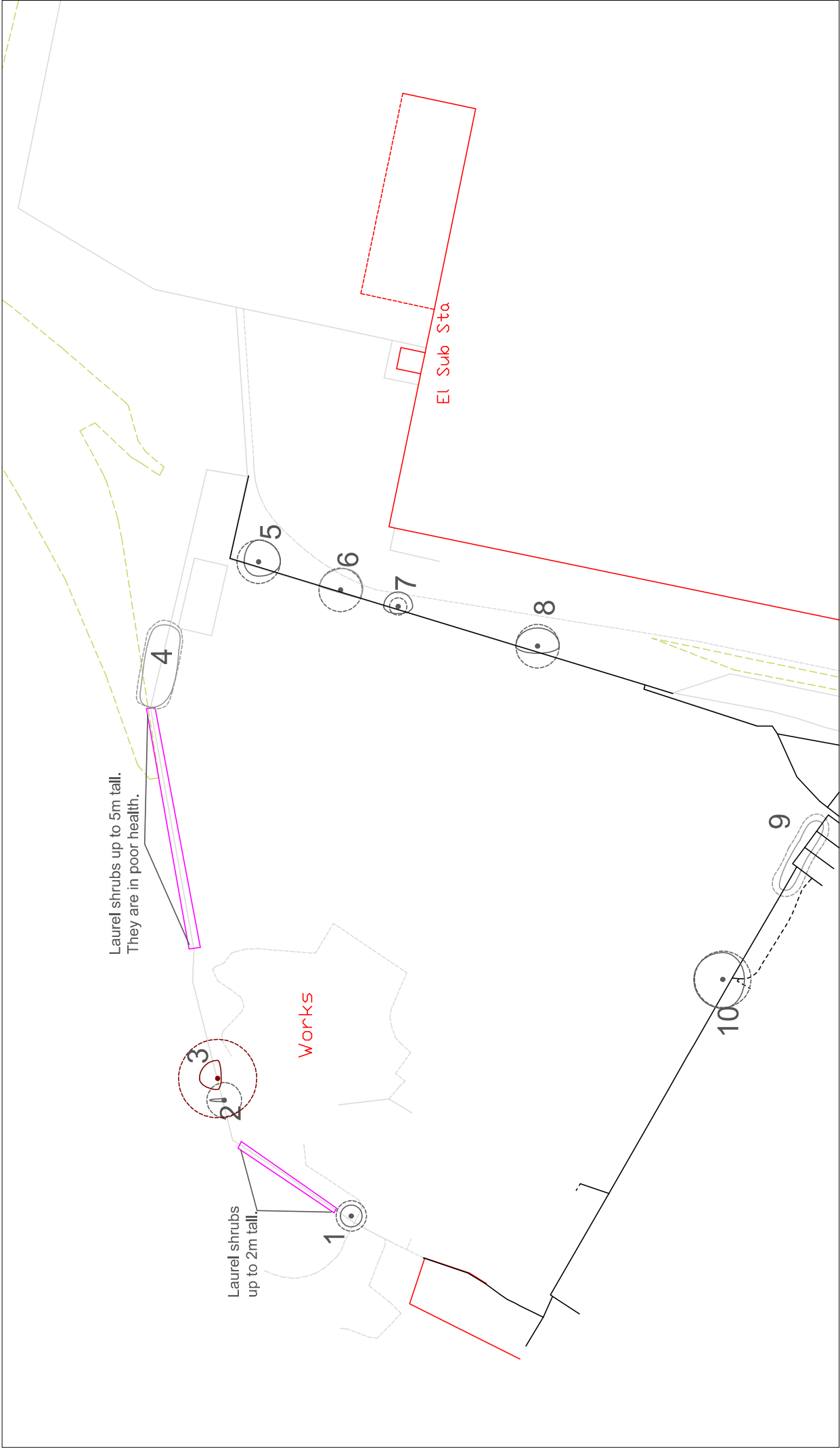
Wildlife conservation legislation

Breeding birds are protected, together with bats and their roosts, whether their roosts are in use or not.

Consideration should be given to the presence of protected species prior to any proposed tree removal or maintenance. This will include breeding birds, principally between March and August, and bats at any time of year.

Tree surgeons should also be aware of their duties under legislation to protect wildlife and carry out their site assessment and work accordingly.

There is a very high chance that birds are breeding in the shrubbery at the moment. Breeding activity could go on into July.

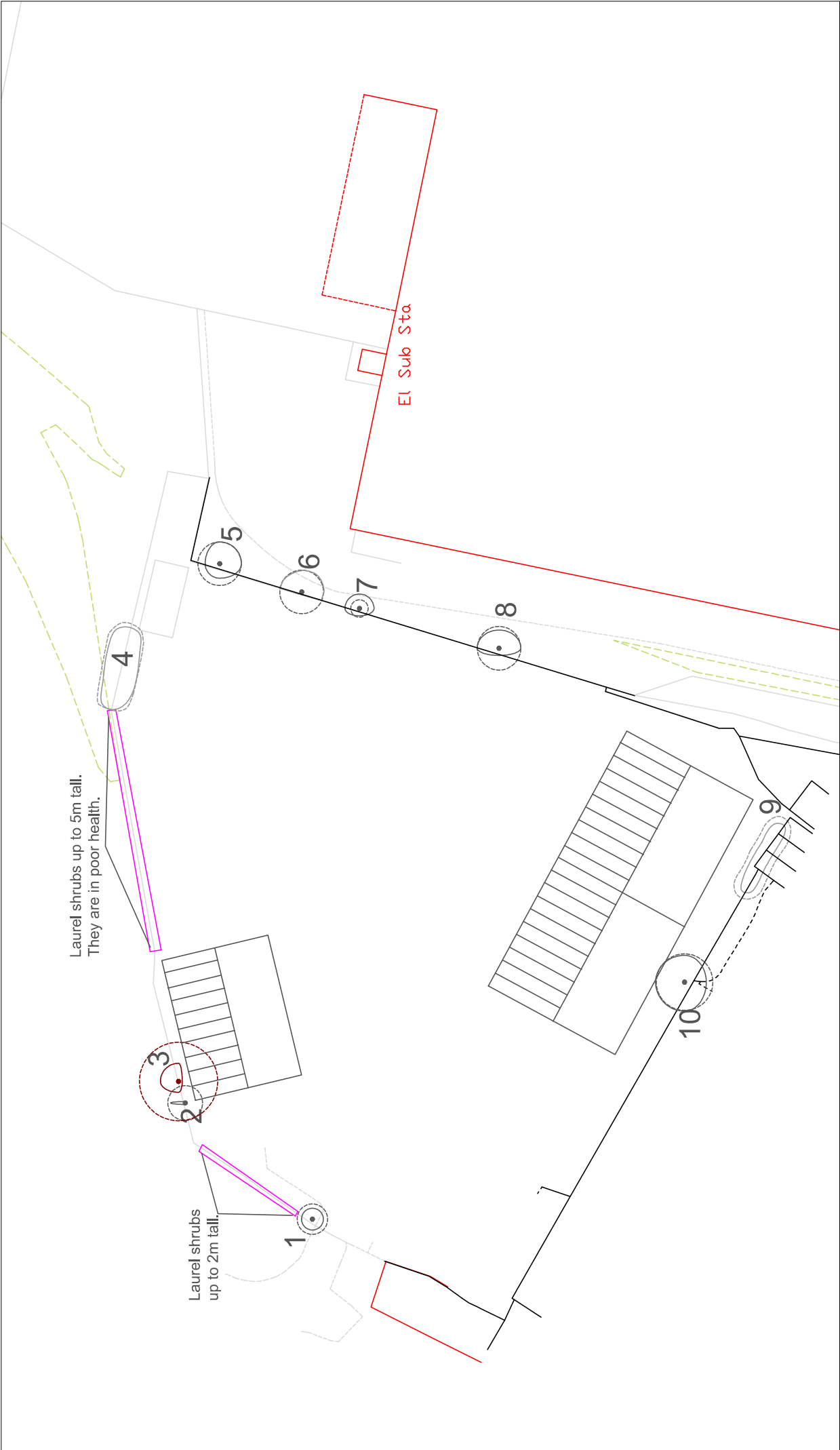


Plan 1 Tree Constraints Plan showing the existing layout

Scale 1: 500 @ A3

- Category U crown
- Category U stem
- Category U RPA
- Category C crown
- Category C stem
- Category C RPA





Plan 2 Tree Constraints Plan showing the proposed layout

Scale 1: 500 @ A3

- Category U crown
- Category U stem
- Category U RPA
- Category C crown
- Category C stem
- Category C RPA



Appendix 1. Qualifications and Experience of Ian Kennedy

1. Qualifications

Ian graduated from the Scottish Agricultural College in August 1995 with a Higher National Diploma in Horticulture (HND) with Distinction.

In 1998 Ian graduated from the University of Aberdeen with a BSc (Hons) Upper second class in Forestry with Arboriculture and Amenity Forestry.

He passed the LANTRA Professional Tree Inspection examination in 2006.

In 2009 his application to become a professional member of the Arboricultural Association was assessed to fulfil all the necessary requirements and he became a professional member of the Association that year.

In 2011 he passed the final examination of the Institute of Chartered Foresters and became a member of that institute in January 2012.

2. Practical experience

Presently Ian is working in private practice as an independent arboricultural and woodland management consultant undertaking tree conditions surveys, pre-development tree surveys to the BS5837:2012 standard, mortgage reports and woodland management planning works. Clients range from home owners and farmers to architects, building companies, local authorities, schools and larger development companies.

Prior to private practice Ian held a number of positions in local government. Firstly, he was the arboriculturalist within a planning office in Essex. Ian gained considerable experience regarding trees in relation to development, in particular BS 5837.

Development work formed the core of his duties and applications ranged from small back garden developments to major schemes such as the redevelopment of Ministry of Defence land for private residential development. Ian also undertook all functions associated with

Tree Preservation Orders (TPOs), including the making of new TPOs, assessing suitability of applications to work on protected trees and trees in conservation areas.

Ian went on to manage a 500 hectare woodland estate for a local authority in South Yorkshire that included a mix of urban and rural woodlands. This included preparation and implementation of detailed management plans for multiple use woodlands. He undertook all aspects of silvicultural management from marking to contract tendering and monitoring. He also managed the access, conservation, landscape and archaeological requirements of the estate. Ian was directly involved in the estate achieving Forest Stewardship Council certification in 2003 and personally ensured continued certification.

Ian has worked extensively with Forestry Commission to obtain the necessary licences for management works and ensured the estate benefited fully from the full range of grants available.

Latterly at the same authority Ian went on to manage the trees and woodlands unit, having overall responsibility for management of the authority's tree and woodland stock and associated staff, together with delivery of other tree related services such as those associated with the Town and Country Planning Acts.

3. Continuing professional development

Ian regularly attends meetings, seminars and training events hosted by The Arboricultural Association, Institute of Chartered Foresters, Royal Forestry Society and Forestry Commission and benefits from the respective journals, briefings and newsletters available to members of the first three of the organisations listed.

4. Relevant experience

Ian Kennedy has spent 20 years working with trees, including as the arboricultural advisor to planning officers for a Local Planning Authority and manager of a trees and woodlands unit for another local authority with overall responsibility for trees, including in relation to the Town and Country Planning Acts.

Appendix 2. Tree Retention Categories

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
Trees unsuitable for retention (see Note)		
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	- Trees that have a serious, irreparable, structural defect, such that their early loss is expected due to collapse, including those that will become unstable after removal or other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.	See Table 2
Trees to be considered for retention		
1 Mainly arboricultural qualities		
2 Mainly landscape qualities		
3 Mainly cultural values, including conservation		
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impairment (e.g. presence of significant though irreparable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees with material conservation or other cultural value
	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

Appendix 3. Explanatory notes for terms used in this report

- **Compass Bearing:** N = north; S = south; E = east; W = west;
- **Age Class:** Assessed as either:
 - Young = a size which could be easily transplanted;
 - Semi-mature = prior to seed bearing age and could be transplanted with care;
 - Young Mature = early maturity, not fully grown but of seed bearing age and may have achieved mature height;
 - Mature = fully grown, annual growth is much reduced;
 - Old Mature = old for the species, possibly starting to decline;
- **Trunk Diameter:** These figures relate to the diameter of the trunk at a given distance above ground level and are recorded in centimetres measured with a diameter tape.
- **Estimated size: #**
- **Health:**
 - Normal Vitality = normal growth and twig extension;
 - Moderate Vitality = reduced twig extension but other than that few signs of ill-health;
 - Early Decline = reduced twig extension and some dead twigs in the outer canopy;
 - Mid-decline = small internodes, the canopy may be thinning and contain dead twigs and/or branches in the outer canopy, older branch wounds that haven't occluded may be decaying and forming cavities;
 - Severe Decline = sparse crown, numerous dead twigs and branches in the outer canopy, older branch wounds likely to be decaying and forming cavities;
 - Dead.
- **Structural Condition**
 - Acute stem union = a weak union between two or more stems at the main forking point caused by the formation of reaction wood. Mechanical pressure at the forking point increases as secondary thickening occurs increasing the risk of failure at that point.
 - Acute branch union = the same principle as acute stem unions but between a stem and a branch or two branches rather than 2 main stems.

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